Non-Pressure Ulcers Post-Field Test Refinement (PFTR) Meeting Summary

MACRA Episode-Based Cost Measures: Clinician Expert Workgroups
Workgroup Webinar, March 19, 2024
April 2024

Contents

Project Overview

The Centers for Medicare & Medicaid Services (CMS) has contracted with Acumen, LLC to develop episode-based cost measures for potential use in the Merit-based Incentive Payment System (MIPS) to meet the requirements of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA). Acumen's measure development approach involves convening clinician expert panels to provide input in cycles of development ("Waves").[1] In Wave 6, we reviewed feedback from prior Waves; this includes input from public comment periods in which we sought input on candidate clinical areas and episode groups for potential development.[2] We developed prioritization criteria used to identify strong candidate episode groups and concepts based on input from our technical expert panel (TEP), Person and Family Engagement (PFE), Clinical Subcommittees (CS), and Clinician Expert Workgroups ("workgroups"). The following Wave 6 episode groups were selected for development based on the prioritization criteria, prior input received, and discussions with CMS: (i) Movement Disorders: Parkinson's and Related Conditions, Multiple Sclerosis [MS], Amyotrophic Lateral Sclerosis [ALS], and (ii) Non-Pressure Ulcers.

We held a nomination period for workgroup members between May 15, 2023, and June 2, 2023. The workgroups are composed of clinicians with expertise directly relevant to the selected episode groups. We finalized workgroups of about 15-20 members in June 2023, and they provided detailed input on the development of the selected episode groups during their first workgroup webinars from June 27 to 28, 2023. Acumen convened the workgroups again for a Service Assignment and Refinement (SAR) Webinar to revisit the specifications recommended

[1] For information on measure development in Wave 6, refer to the Wave 6 Measure Development Process (PDF, 599KB) document (https://www.cms.gov/files/document/2024-02-cmft-ebcm-process.pdf).
[2] For a summary of comments we received during the Waves 4 and 5 public comment periods, refer to the Wave 4 Measure Development Public Comment Summary Report (PDF, 839 KB) (https://www.cms.gov/files/document/wave-4-public-comment-summary.pdf) and the Wave 5 Measure Development Public Comment Summary Report (PDF, 692 KB) (https://www.cms.gov/files/document/wave-5-public-comment-summary-report.pdf).

during the initial meeting and refine the measures prior to national field testing. After the national field test from February 1, 2024, to March 14, 2024, Acumen convened the workgroups for a Post-Field Test Refinement (PFTR) Webinar to continue measure specification and refinement discussions in March 2024. For Wave 6, all workgroup meetings were held virtually.

Non-Pressure Ulcers PFTR Webinar, March 19, 2024

This meeting summary document outlines the purpose, discussion, and recommendations from the Non-Pressure Ulcers PFTR Webinar. Section 1 provides an overview of the webinar goals and process. Section 2 summarizes the discussion and recommendations from the workgroup. Appendix A provides an overview of the chronic condition cost measure framework.

1. Overview

The goals of the Non-Pressure Ulcers PFTR Webinar were the following:

(i) Review feedback on the measure from the national field test
(ii) Provide input to specify the cost measure for potential use in MIPS that can accurately distinguish between good and poor performance among clinicians in terms of cost efficiency
(iii) Consider results of empirical analyses and the Person and Family Partner (PFP) findings
(iv) Provide input on defining the patient cohort, accounting for sub-populations to ensure that the measure allows for meaningful clinical comparisons, and identifying clinically related services

The meeting was held online via webinar and attended by 16 of the 19 workgroup members. The webinar was facilitated by Acumen moderator, Heather Litvinoff. The Non-Pressure Ulcers workgroup chair was Caitlin Hicks, who also facilitated meeting discussions. One PFP, Dorothy Winningham, attended the webinar to discuss and address questions regarding the PFE survey findings. The MACRA Episode-Based Cost Measure Workgroup Composition List contains the full list of members, including names, professional roles, employers, and clinical specialties.[3]

All interested parties beyond the workgroup members had access to a public dial-in number to observe the meeting as part of Acumen's continued effort to increase the transparency of the measure development process.

Prior to the webinar, workgroup members were provided with information and materials to inform their meeting discussions. This includes the meeting agenda, slide deck, and a summary of all the field testing feedback received for the draft measure. Also, workgroup members received the investigations described in Table 1 below.

Table 1: Workgroup Webinar Investigations

Investigation	Description
Sub-Population Analysis	• Provides data on the frequency and cost associated with a set of sub-populations informed by public comments received, prior workgroup discussions, and deliberations among the Acumen clinical team • Useful for discussion regarding accounting for patient heterogeneity

[3] CMS, MACRA Episode-Based Cost Measures Wave 6 Clinician Expert Workgroup Composition (Membership) List (PDF, 207 KB) (https://www.cms.gov/files/document/wave-6-measure-specific-workgroup-composition-list.pdf).

Investigation	Description
Service Utilization over Time Analysis	• Provides data on the top 200 most frequent services for each claim setting across episodes for the draft version of the measure along with various metrics regarding those services (e.g., share of episodes with that service, average cost of the service per episode, share of attributed clinicians who furnished the service) • Useful for discussion regarding identifying clinically relevant services

After the webinar, workgroup members were sent a recording of the webinar and polled on their preferences to ensure the measures are developed based on well-documented input. Based on similar meeting discussion practices, the threshold for support was >60% consensus among poll responses. This document summarizes the workgroup members' input from both the discussion as well as the polls.

This meeting was convened by Acumen as part of the measure development process to gather expert clinical input; as such, these are preliminary discussions and materials, which don't represent any final decisions about the measure specifications or MIPS.

2. Summary of Sessions and Discussion

This section is organized based on meeting sessions and describes workgroup member discussions and recommendations. The first sub-section summarizes the PFP findings discussed during the webinar. The remaining sub-sections describe workgroup member discussions and recommendations on defining the patient cohort, accounting for patient heterogeneity, and identifying clinically related services, respectively. The final sub-section provides an overview of next steps for the measure development process.

2.1 Person and Family Partner (PFP) Findings and Discussion

During field testing, we gathered input from 5 commenters, including PFPs, through the Patient and Family Engagement (PFE) Field Testing survey on the Non-Pressure Ulcers measure. During the webinar, a PFP shared these findings and fielded questions from workgroup members.

Given the multiple specialties and healthcare professionals involved in treating and managing non-pressure ulcers, PFPs highlighted the importance of care coordination. Specialties highlighted by PFPs included primary care providers (PCPs), nurse practitioners (NPs), surgeons, wound care specialists, home health aides, licensed practical nurses (LPNs), and personal care assistants. A couple of PFPs reported having less oversight in home health care, which impacted adherence to the treatment regimen and resulted in delayed referral for specialist care. In addition to home health, PFPs also reported receiving non-pressure ulcers care in long-term care facilities, rehabilitation centers, and skilled nursing facilities.

PFPs noted various treatment services provided to patients with non-pressure ulcers including pain management, wound dressing products, emergency department (ED) services, range of motion exercises, hospice care, and mobility aids (e.g., gait belt for walking, circulation splints, and artificial limbs). Furthermore, PFPs emphasized the need for educating patients and caregivers on the various treatment modalities for non-pressure ulcers care. One PFP noted that they had no prior knowledge of non-pressure ulcers. They also stated that they received limited information about treatment options in long-term rehabilitation facilities. A couple of PFPs explained that the educational materials (e.g., brochures) they received positively impacted wound healing and their overall care experience. They also expressed that consistent communication between the clinician and patient improved medication adherence.

Lastly, PFPs recounted their experiences with complications related to their non-pressure ulcers. One PFP explained that their family member had a lower extremity ulcer that resulted in an amputation and subsequently depression and social isolation. They also noted that assistance with low self-esteem and pain management would have improved their care experience. Another PFP stated that a follow-up ultrasound and anti-inflammatory medications would have improved their care outcomes following an ulcer biopsy.

2.2 Defining the Patient Cohort

Acumen reviewed the methodology for constructing an episode-based cost measure, including the steps for defining the patient cohort. Cost measures for chronic conditions aim to identify a longitudinal patient-clinician relationship (i.e., trigger an episode of care for that condition) using the presence of related service and diagnosis codes on claims billed by the same clinician group (as identified by their Taxpayer Identification Number [TIN]). In the draft Non-Pressure Ulcers measure, episodes are triggered by a pair of services (i.e., triggering and confirming claims) billed by the same TIN within 180 days. The trigger claim is an outpatient evaluation and management (E/M) or a measure-specific E/M service. The confirming claim is either another trigger claim or a condition-related service (i.e., rehabilitation service, debridement, wound dressing product, skin graft and flap, and wound modalities). Both the triggering and confirming claims should be accompanied by a relevant International Classification of Diseases, Tenth Revision (ICD-10) diagnosis code for non-pressure ulcers. The steps for defining the patient cohort are described in Steps 1-4 of Table A1 in Appendix A. Acumen asked the workgroup to review the triggering methodology, as well as the draft services and diagnoses, to discuss how the draft specifications may be improved.

During the national field test, commenters suggested expanding the confirming services to include ulcer biopsies, vascular ultrasounds, and other non-invasive vascular testing. Acumen presented frequency of such services appearing in the Medicare claims data and the workgroup considered including these as confirming services for this episode group.

Workgroup members had mixed reactions about expanding the service codes used to confirm a Non-Pressure Ulcers episode. They considered whether expanding the confirming services would better capture the patient cohort to reflect the measure's intent to assess ongoing care for non-pressure ulcers. The workgroup recognized the relationship between triggering and attribution and discussed potential implications of broadening the confirming services for the measure. Some members opposed including vascular ultrasounds and other non-invasive vascular testing as confirming services for this episode group, as they aren't specific to care for patients with non-pressure ulcers. They explained that these services are more likely to introduce patients and clinicians in the measure that would otherwise fall outside the measure's scope. While some members proposed using Magnetic Resonance Imaging (MRI) and Computed Tomography (CT) services instead, others opposed including them as confirming services. Acumen explained that including diagnostic imaging services (e.g., MRI, vascular ultrasounds, and CT scans) in the triggering logic could potentially lead to specialties, like radiology, being attributed the measure.

The workgroup also discussed the continued inclusion of hyperbaric oxygen therapy and placement of an Unna boot as confirming services. A couple of workgroup members supported including services like placement of an Unna boot and other multi-layered compression dressings as confirming services. Some members disagreed with including them in the triggering logic, explaining that while these services can be used to treat non-pressure ulcers patients, they may also be used for other non-related conditions like edema. During the

discussion, Acumen clarified that the triggering logic requires the service codes to be paired with a relevant ICD-10 diagnosis for non-pressure ulcers in order to trigger an episode of care.

Key Takeaways from Discussion and/or Polls for Defining the Patient Cohort:

- Since the workgroup didn't reach consensus on including biopsy of ulceration as a confirming service, it won't be included as a confirming service in the measure.
- Members recommended excluding MRI scans, CT scans, and vascular ultrasounds and other non-invasive vascular testing as additional confirming services.
- Members recommended continuing to include hyperbaric oxygen therapy and placement of an Unna boot as confirming services.

2.3 Accounting for Patient Heterogeneity

Members engaged in a detailed discussion about how to account for patient heterogeneity among various sub-populations within the Non-Pressure Ulcers episode group. Sub-populations refer to patient cohorts as defined by their pre-existing conditions and other patient characteristics. Acumen described the methods for accounting for patient heterogeneity, and those are described in Table 2 below.

Table 2: Methods for Accounting for Patient Heterogeneity

Method	Description
Sub-Group	• If applicable, we may stratify the patient population into mutually exclusive and exhaustive sub-groups to define more homogenous patient cohorts. • Sub-grouping is a method that's intended for when we would want to compare episodes only with other similar episodes within the same sub-group. • This approach is used when sub-groups are very different from one another, and each sub-group requires its own risk adjustment model. • Since each sub-group will have its own risk adjustment model, the size of each sub-group should be sufficiently large.
Risk-Adjust	• We may define covariates in the risk adjustment model for the measure. • Risk adjusting is a method to account for the case-mix of patients and other non-clinical characteristics that influence complexity. It's meant to be used for sub-populations that make a large share of patients who have a characteristic that's outside of the attributed clinician's reasonable influence. • Risk-adjusted cost measures adjust observed episode spending to an expected episode spending (predicted by a risk adjustment model).
Exclude	• We may identify certain measure exclusions. • Excluding is a method in which we exclude certain patients or episodes to address issues with patient heterogeneity. This approach should be used when the sub-population affects a small, unique set of patients in which risk adjustment wouldn't be sufficient to account for their differences in expected cost.
Monitor for Further Testing	• We may monitor certain sub-populations for further testing. • Monitoring for further testing is an option for flagging certain sub-populations that the workgroup may revisit later during measure development upon review of further data. This approach is best used when the workgroup requests additional data or information on a sub-population to discuss the appropriate method for meaningful clinical comparison.

After Acumen provided a description of each method and presented analytic data on sub-populations, workgroup members discussed the patient sub-populations and their preferences for how to address them. Information about these methods is also described in Steps 3, 6, and 7 of Table A1 in Appendix A.

2.3.1 Refinements to Sub-grouping Methodology

Based on prior workgroup consensus, the Non-Pressure Ulcers measure sub-groups by ulcer type: (i) arterial ulcer type, (ii) diabetic ulcer type, (iii) venous ulcer type, (iv) multiple ulcer types

(i.e., 2 or more types of ulcers present), and (v) non-specific ulcer type (i.e., L97 and L98 diagnosis codes only). Prior workgroup input also informed the following refinements to the sub-grouping methodology:

(i) Including the start of the grouping window to improve the classification of ulcers
(ii) Requiring 80% of diagnosis codes to indicate a single ulcer type, which increased the agreement of downstream diagnosis with the sub-group designation

Risk adjustment is applied separately for each sub-group and patients' Part D enrollment status (i.e., with or without Part D enrollment) to allow for fair clinical comparisons among clinicians with a similar patient case-mix.

Based on concerns raised by commenters, the workgroup discussed potential refinements to the sub-grouping method to improve classification of ulcer types. The workgroup mentioned that ulcer type is a good indicator of resource use for this episode group. However, they considered the potential for misdiagnosing and underdiagnosing the different types of ulcers due to variations in billing practices among clinicians. The current measure uses ulcer-specific diagnosis codes in the sub-grouping algorithm to indicate different ulcer types. Workgroup members noted that those ulcer-specific diagnosis codes might be too limited in defining patient's ulcer types, as in daily practice clinicians are likely to bill a general chronic ulcer diagnosis (i.e., L97 and L98 diagnosis codes) paired with a diagnosis for the underlying disease (i.e., diabetes or arterial disease) to indicate patients with diabetic or arterial ulcers, rather than billing the ulcer-specific diagnosis (i.e., diabetic foot ulcers or atherosclerosis with ulceration). Workgroup members confirmed that the billing practice for venous ulcer type is more precise and consistent, and therefore, doesn't require such refinement.

During the discussion, Acumen clarified that only those episodes that met the measure's triggering logic and inclusion/exclusion criteria are stratified into sub-groups. Furthermore, episodes are evaluated in the 120-day lookback period (i.e., before the start of the episode) plus the episode start date to identify the ulcer type. For new patients, the diagnoses present on the episode start date are used to identify the ulcer type. Acumen also asked workgroup members whether historical diagnoses provide sufficient evidence of ulcer type, or if episodes should be evaluated based on the treatment process. The workgroup had no concerns about using historical diagnoses on claims to identify ulcer type. However, some members proposed pairing the L97 and L98 diagnosis codes with a broader set of diagnosis codes for the underlying disease (i.e., arterial disease, diabetes) to better identify the episodes with arterial or diabetic ulcers. One member noted that pairing the general chronic ulcer diagnosis codes with a relevant diagnosis for diabetes will capture the diabetic ulcers that aren't located in the lower extremities. Another workgroup member also expressed concern about differentiating pressure vs. non-pressure ulcer etiologies in the measure.

The workgroup also considered the proportion of episodes that don't fit into the current sub-group designations and are therefore excluded from the measure. Acumen presented empirical data showing that only 1.5% of all episodes that met the triggering logic for this episode group were excluded because they didn't meet the criteria for any of the measure's sub-groups.

2.3.2 Additional Sub-Populations for Addressing Patient Heterogeneity

During national field testing, commenters suggested that the Non-Pressure Ulcers measure account for additional clinical characteristics like size of ulcer at time of diagnosis, number of ulcers, and frequency/intensity of visits. Commenters also proposed adjusting for comorbid conditions like end-stage renal disease (ESRD), malnutrition (i.e., obesity), diabetes,

malignancies, peripheral vascular disease, rheumatoid arthritis, lupus, and mental health indicators (e.g., major depressive and bipolar disorders, dementia, substance use disorders, and personality disorders), all of which are already accounted for in the CMS Hierarchical Condition Category (HCC) risk adjustment model. Acumen also noted that smoking and frailty indicators are risk-adjusted in the measure. The measure also currently excludes patients with pyoderma gangrenosum, scleroderma, sickle cell anemia, calciphylaxis, and vasculitis.

While the size and number of ulcers at time of diagnosis isn't information that can be accessed through claims data, Acumen presented testing results showing that the current risk adjustment model consistently predicts episode costs across patient risk levels. The workgroup discussed some additional sub-populations of patients that should be accounted for in the measure, including patients with the following conditions:

- Lymphedema
- History of sleep apnea
- Hidradenitis Suppurativa (HS)
- Raynaud's disease
- Sjogren's Syndrome
- Buerger's disease

Workgroup members also considered how the measure should account for transplant patients and patients with recent hospice use, as they hadn't reached a consensus in the SAR Webinar. They maintained that these patients tend to be more complex than the general population of patients with non-pressure ulcers. One workgroup member noted that sleep apnea is a common comorbid condition among patients with venous ulcers and that these patients tend to experience complications (e.g., hypoxia) that impact wound healing. Workgroup members also debated how to handle patients with autoimmune conditions in the measure, given the size of the patient sub-population and the potential impact on the measure. One member supported adjusting for patients with autoimmune conditions, like Raynaud's disease, Sjogren's Syndrome, and Buerger's disease, that have a more direct impact on wound healing due to underlying vasculitis. Another workgroup member suggested that patients with these autoimmune conditions who also have underlying vasculitis should be treated as having vasculitis, and should therefore be excluded from the measure. Some members supported excluding patients with HS, while adjusting for patients with lymphedema.

2.3.3 Impact of Social Risk Factors

Acumen assesses the impact of social risk factors (SRFs) on the measure score to ensure there's a balance between being fair to clinicians that treat higher shares of vulnerable patients and the possibility of masking poor performance and perpetuating disparity if clinicians are held to a different standard. During the webinar, Acumen presented empirical data showing that patient dual status (i.e., dual enrollment in Medicare and Medicaid) is the most consistent predictor of episode costs across risk adjustment models.

Furthermore, testing also showed that dual episodes tend to have slightly higher mean observed-to-expected (O/E) cost ratios compared to non-dual episodes. Furthermore, worse performance scores are observed among providers with a higher share of dual beneficiaries for both dual and non-dual episodes. While many clinicians (91.4%) were able to perform equally well on their dual and non-dual episodes, there are some clinicians (6.8%) performing significantly worse on their dual episodes, which suggests that adjusting for patient dual status may be appropriate for the Non-Pressure Ulcers measure.

Workgroup members had no concerns about adjusting for patient dual status for this episode. They discussed the feasibility of accessing claims-based metrics that would broadly capture social determinants of health (SDOH) indicators for the patient population. One workgroup member recognized the barriers to accessing information about SDOH (e.g., health literacy level) via claims that would apply to the cost measure. Another member noted that zip code data could be used to assess area deprivation index (ADI). During the discussion, Acumen discussed that preliminary field test results for the Non-Pressure Ulcers measure that showed dual status to be the best proxy of SRFs in predicting health outcomes, rather than variables like socioeconomic status, which aren't always accurate at the individual level.[4]

2.3.4 Adjusting for Site of Service

Based on concerns raised during national field testing, Acumen investigated the impact of site of service [i.e., hospital outpatient departments (HOPDs), skilled nursing facility (SNF), ambulatory surgical centers (ASCs), and office-based settings] on provider performance. Testing results showed variations in provider performance for TINs and TIN-National Provider Identifiers (TIN-NPIs) at the 20-episode testing volume. Non-Pressure Ulcers episodes in certain places of service, like HOPDs, had higher mean O/E cost ratios, which suggest that episode costs may not be well-adjusted to reflect resource use in these settings. After the presentation, Acumen sought input from the workgroup about the factors driving these cost differences among providers across settings and whether the measure should account for site of service.

The workgroup discussed the differences in observed spending across places of service and the potential unintended consequences if the measure applies an episode-level adjustment for place of service. Regarding variations in observed episode costs, a workgroup member stated that high-cost services, like hyperbaric oxygen therapy services and cellular tissue products/skin substitutes, are billed at the facility-level within HOPDs. They explained that these services are typically provided within HOPDs and may explain the differences in non-pressure ulcers episode costs. The workgroup chair suggested that vascular interventions, like revascularizations, could also be potential drivers of cost difference across places of service, as those costs tend to differ depending on where the services are provided. Furthermore, one workgroup member noted that while services provided in office-based settings generally have lower costs than those delivered in HOPDs, additional considerations should be given to provider-level factors to allow for fair comparisons, such as whether they're employed by the hospital system or choose to provide services in HOPDs despite an office being their main site of practice.

The workgroup chair questioned the feasibility of sub-grouping by place of service and whether risk adjustment appropriately neutralizes place of service cost differences in the cost measure. Acumen clarified that sub-grouping by place of service may not be appropriate nor feasible for the Non-Pressure Ulcers measure, given that there are already 5 sub-groups and 10 regression models (i.e., with and without part D enrollment by each sub-group) in the measure. Acumen also explained that the draft methodology checks for place of service information on the trigger/confirming claims billed by attributed providers at the TIN and TIN-NPI level to ensure it reflects the site of practice with the majority of services. Acumen will continue to evaluate the determination of a provider's place of service and the impact of risk-adjusting a provider's place of service on an episode's expected spending.

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[4] For more information about preliminary field test results for SRFs for the Non-Pressure Ulcers measure, refer to Section 2.7 of the Non-Pressure Ulcers Measure Testing Form (PDF, 1,762 KB) of the Wave 6 Measure Testing Forms (ZIP, 3,579 KB) (https://www.cms.gov/files/zip/2024-wave-6-mtfs.zip).

Workgroup members also raised the question of specialty-specific adjustments in the cost measure, given that there's no recognized specialty for wound care practitioners. They stated that wound care practitioners provide a similar type of care (i.e., wound care services) regardless of their provider specialty codes or designation.

Key Takeaways from Discussion and/or Polls for Accounting for Patient Heterogeneity:

- Members reached consensus on pairing the chronic non-pressure ulcers codes (i.e., L97 and L98 diagnosis codes) with a broader set of ICD-10 diagnosis codes for diabetes and arterial disease to indicate a diabetic and arterial ulcer type, respectively. Some members had concerns about potential misclassification in sub-groups under this change and the disincentives towards accurate billing.
- Members supported risk-adjusting for patients with lymphedema and a history of sleep apnea. They were also in favor of excluding patients with recent hospice use and Hidradenitis Suppurativa (HS).
- Since members didn't reach a consensus on whether to risk-adjust or exclude transplant patients and patients with Sjogren's Syndrome, Raynaud's Disease, and Buerger's Disease, they won't be included as separate risk adjustors or exclusions in the measure. Additionally, these patient sub-populations are already accounted for in the CMS HCC risk adjustment model.[5]
- Since members were in favor of adjusting for site of service, the measure will risk-adjust for an episode's expected spending using the main site of practice location of the clinician group attributed.

2.4 Identifying Clinically Related Services

Acumen described the purpose of service assignment so that members could discuss which services associated with the attributed clinician's role in managing the patient's care should be included in the cost measure. These assigned services should be inclusive enough to identify a measurable performance difference between clinicians but also not introduce excessive noise. Episode-based cost measures aim to only include clinically relevant costs whose occurrence, intensity, and/or frequency are within the reasonable influence of the attributed clinician. Service assignment can be an effective form of adjusting for patient risk by omitting unrelated costs not furnished for Non-Pressure Ulcers. Information about identifying clinically related services is also described in Step 5 of Table A1 in Appendix A.

Acumen asked for feedback on whether the following preliminary service assignment categories and examples capture both standard treatment and services provided to treat complications or other consequences of care:

- Chemotherapy or radiation for ulceration
- Bypass grafting of lower extremity
- Phlebectomy of varicose veins
- Ultraviolet C
- Shock wave therapy
- Ultrasound-guided sclerotherapy
- Venous ablation procedures

[5] Transplant patients are included in HCC 186 "Major Organ Transplant or Replacement Status," Buerger's Disease is included in HCC 108 "Vascular Disease," severe cases of Raynaud's Disease are included in HCC 106 "Atherosclerosis of the Extremities with Ulceration or Gangrene," and Sjogren's Syndrome is included in HCC 40 "Rheumatoid Arthritis and Inflammatory Connective Tissue Disease" and HCC 112 "Fibrosis of Lung and Other Chronic Lung Disorders."

- Vascular laboratory testing
- Microneedling
- MIST® therapy

Workgroup members discussed the proposed services to assign for the measure. Some workgroup members were opposed to adding chemotherapy or radiation for ulceration while others supported including venous ablation procedures. A couple of members recounted that shock wave therapy is currently a Current Procedural Terminology (CPT) Category III code (i.e., a temporary code) and should therefore not be included in the measure at this time. One workgroup member had concerns regarding the costs of services assigned in SNFs, given differences in service delivery relative to other care settings.

Additionally, workgroup members also emphasized the necessity of including skin substitute and wound dressing products [A and Q CPT/Healthcare Common Procedure Coding System (CPT/HCPCS) codes] in the poll as clinically related services, since they make up a meaningful part of the episode spending. The current draft measure specifications assign costs for those services through the Clinical Classifications Software (CCS) Services and Procedures Category 243 (Durable Medical Equipment and Supplies) and assign all trigger, confirming, and reaffirming services occurring during the episode window.[6]

Key Takeaways from Discussion and/or Polls for Identifying Clinically Related Services:

- Members recommended including MIST® therapy and vascular laboratory testing as additional clinically related services. Since members didn't reach consensus on including venous ablation procedures, ultrasound-guided sclerotherapy, and shock wave therapy, they won't be included in the measure as additional clinically related services. Although members also didn't reach consensus on including bypass grafting of lower extremity and phlebectomy of varicose veins services, they will continue to be included since they were already assigned as clinically related services in the draft measure specifications.
- Members recommended excluding Ultraviolet C, microneedling, and chemotherapy or radiation for ulceration as clinically related services.

2.5 Next Steps

In the last session, Acumen provided a wrap up of the discussion and an overview of the next steps. After the meeting, Acumen distributed the PFTR Webinar Poll to gather input from members on the discussions held during the webinar. Acumen will operationalize input for the measure specifications based on PFTR Webinar discussion and poll results and will follow up with workgroup members with more information about the final steps in the measure development process.

[6] For more information about service assignment under the Non-Pressure Ulcers measure, refer to Section 4.5 of the Non-Pressure Ulcers Measure Draft Cost Measure Methodology (PDF, 3,390 KB) of the Wave 6 Episode-Based Cost Measure Specifications (ZIP, 13,874 KB) (https://www.cms.gov/files/zip/2024-02-wave-6-ft-measure-specs.zip).

APPENDIX A: CHRONIC CONDITION COST MEASURE FRAMEWORK

The table below provides an overview of the chronic condition episode-based cost measure framework.

Table A1. Chronic Condition Cost Measure Framework

Step	Description

Step 1: Trigger – Identify a Clinician-Patient Relationship	• Trigger logic looks for a pair of services billed by the same clinician group (identified by their TIN) to identify a clinician-patient relationship. The time period between the 2 services that constitute a trigger event is referred to as the 'trigger window' and reflects how often the clinician group sees the patient.
	• A **trigger event** consists of (i) a trigger claim, and (ii) a confirming claim.
	  ○ A **trigger claim** is an outpatient evaluation and management (E&M) code with a relevant diagnosis
	  ○ A **confirming claim** is either another outpatient E&M code with a relevant diagnosis, or a condition-related Current Procedural Terminology/Healthcare Common Procedure Coding System (CPT/HCPCS) code with a relevant diagnosis

Step 2: Reaffirm – Identify the Total Length of Care	• Once a clinician-patient relationship is identified, this starts a period of time when the TIN is measured on related costs (i.e., 'attribution window'). • The attribution can be extended if we continue to see that the TIN is providing care for the patient for this condition (as identified by 'reaffirming claims'). The same trigger and confirming codes are typically used to reaffirm the clinician-patient relationship.

Step 3: Define an Episode During Which Cost will be Assessed	• An 'episode' is a segment of care that allows clinicians to be assessed in a measurement (or performance) period.
	• An episode window length is one year at a minimum. Episodes are assessed in the measurement period in which they end and only include days not previously measured in preceding measurement periods.
	  ○ The episode window length may vary depending on the length of the total relationship between a patient and clinician group ('total attribution window'), and the data that hasn't been assessed in preceding measurement periods.
	  ○ Clinicians or clinician groups are measured on a patient at the end of the calendar year if there are 365 days' worth of claims data that hasn't previously been assessed or when the total attribution window ends, ensuring costs are only assessed once.
	• Once an episode window is defined, if applicable, the episode is placed into one of the episode sub-groups to enable meaningful clinical comparisons.

Step 4: Attribute the Episode to the Clinician Group and Clinician(s)	• Attribute episode to the TIN that billed the trigger services (trigger claim and confirming claim) for the 'total attribution window.'
	• Attribute episode to the clinicians [identified by their TIN-National Provider Identifier (TIN-NPI)] within the attributed TIN that played a substantial role in the patient's care:
	  ○ Billed at least 30% of outpatient E&M codes with a relevant diagnosis and/or condition-related CPT/HCPCS codes with a relevant diagnosis
	• The TIN-NPI must also meet particular requirements to ensure that no costs are assigned to the attributed TIN-NPI prior to seeing the patient and that we are attributing episodes to clinicians who manage a patient's chronic care. The TIN-NPI must have:
	  ○ Check #1: Provided condition-related care to the patient prior to or on the episode start date (to ensure that clinicians are attributed episodes after they met the patient)
	  ○ Check #2: Prescribed at least 2 condition-related medications to 2 different patients during the current plus prior performance period (to ensure that attributed clinicians are actually involved in providing ongoing chronic care management)
	  ▪ This check is only used in measures where the use of prescriptions is informative about the nature of care that the clinician provides. When some of the types of clinicians that manage the condition don't always prescribe the relevant medication (e.g., clinicians that can't prescribe), a chronic condition cost measure wouldn't use this check.

Step	Description
Step 5: Assign the Cost of Clinically Related Services	• Measures include only the costs for clinically related services, rather than all costs within the episode. • Clinically related services include treatment, monitoring, complications, and other services where the attributed clinician has reasonable influence on occurrence, frequency, and/or intensity. • Costs are payment standardized to remove variation due to geographic region or provider-specific adjustments. • These are identified through medical service codes and diagnosis codes. The measure calculates the cost of these specific services observed during the episode window.
Step 6: Apply Measure Exclusions	• Exclusions remove unique groups of patients or episodes from cost measure calculation in cases where it may be impractical or unfair to compare the costs of caring for these patients to the costs of caring for the cohort at large.
Step 7: Risk-Adjust Episode Cost	• Risk adjustment predicts the expected cost of an episode by adjusting for factors outside of the clinician's control. • The risk adjustment model includes many variables the workgroup will discuss throughout development. As a starting point, we assess the following: (i) Hierarchical Condition Categories (HCCs) from the CMS-HCC Version 24 (V24) Risk Adjustment Model, which includes 86 HCCs, (ii) age variables, (iii) indicator variables, and (iv) interaction variables. • In addition, each measure may have tailored risk adjustors for factors specific to the condition. • If the cost measure has episode sub-groups, the risk adjustment model is run separately for each sub-group.
Step 8: Calculate the Measure Score	• The measure is calculated as the ratio of the observed cost (standardized to remove geographic and other differences) to the expected cost, averaged across all episodes attributed to the provider. • Longer episodes are weighted more heavily than shorter ones to ensure fair comparisons; a scaled approach is used to calculate observed and expected costs. • The average ratio of observed to expected costs per provider is then translated into a dollar amount as the provider's measure score.

Please contact **Acumen MACRA Clinical Committee Support** at macra-clinical-committee-support@acumenllc.com if you have any questions. If you're interested in receiving updates about MACRA Episode-Based Cost Measures, please complete this Mailing List Sign-Up Form to be added to our mailing list.